# **IDAHO DEPARTMENT OF LANDS** YEAR END FIRE REPORT **CALENDAR YEAR 2003**



# YEAR END FIRE REPORT FOR CY 2003

#### **SEASON IN REVIEW**

Even under the effects of a multiple year drought, the 2003 fire season was below average in terms of fire occurrence, however acreage burned was up. On lands for which the Idaho Department of Lands, Clearwater Potlatch Timber Protective Association, and Southern Idaho Timber Protective Association provide wildland fire protection, fire fighters responded to 362 fires (87 percent of average). These fires burned 13,401 acres, which is 143 percent of average.

Quick response by dedicated teams of firefighters kept 94 percent of these fires below 10 acres.

Human activity ignited 190 fires (52 percent), and accounted for 99 percent of the burned area, for 13,277 acres. Debris burning started the most person caused fires, but equipment use burned the most area and was the most expensive category. Lightning started 172 fires (48 percent of the year's total) and burned 124 acres or 1% percent of the total ignitions.

#### FIRE WEATHER

The spring of 2003 brought above normal precipitation in the States Protection Area, with Lewiston receiving 146% of average precipitation. Grass growth was excellent and provided ample fuel for summer wildfires. June began a drying trend and North Idaho received only 20% of its normal rain during the summer. Boise was a little better, but still dry at 55% of an average summers precipitation. Higher than normal temperatures also contributed by lowering the humidity and desiccating plants. For example, Boise had its hottest summer in 63 years. The hot and dry weather lead to a severe fire season with easy ignitions and energies released from fire fronts being at all time record highs.



#### **MULTIPLE FIRES**

The 2003 fire season saw 54 instances of more than one fire per day on a Forest Protective District. Priest Lake had 12 fires reported in one day, the most of any District. One two day period had 39 ignitions in the State's Protection Area. A total of 171 (47%) fires occurred on multiple fire days.

#### LARGE FIRES

2003 saw six fires exceed 100 acres. Two of these were on Craig Mountain District, two on Ponderosa, and one each on Maggie Creek and Priest Lake. Table 1 provides further information:

TABLE 1

Fires over 100 acres

Fire Name	District Name	Out Size	<b>Total Cost</b>
Mile Post 59	Maggie Creek FPD	8,142	\$2,867,165
East of Arrow	Craig Mountain FPD	3,200	\$31,508
Combine	Craig Mountain FPD	600	\$1,249
Hunt Creek	Priest Lake FPD	590	\$2,567,908
Flannigan	Ponderosa FPD	190	\$390,920
Straight Stretch	Ponderosa FPD	118	\$357

#### TEAM USE

The Idaho Department of Lands supported Interagency Incident Management
Teams with 12 employees serving as team members. In the Northern Rockies,
IDL personnel held one position on a Type 1 team, and 7 positions on Type 2
teams. Great Basin participation consisted of three slots on Type 2 teams and

one on a Type 1 team. State personnel also contributed by accepting 185 off unit assignments in a variety of positions.

Two IDL fires required management teams. Roger Kechter's Northern Rockies Type 2 team managed the Hunt Cr. fire on the Priest Lake District, and the Mile Post 59 fire on the Maggie Creek District was managed by a Florida Team. The Mile Post 59 fire threatened numerous residences as well as the town of Kamiah, and closed Highway 12 for a week.

#### FIRE COSTS

The fire reports estimate 2003's suppression costs for IDL fires at \$8,019,881, with the ten most expensive fires of the year shown in Table 2. These fires represent only 3 percent of the fires, but 68 percent of the acreage, and 86 percent of the cost.

Table 2

**Ten Most Expensive Fires** 

District Name	Fire Name	<b>Total Cost</b>	Out Size
Maggie Creek FPD	Mile Post 59	\$2,867,165	8,142
Priest Lake FPD	Hunt Creek	\$2,567,908	590
Ponderosa FPD	Flannigan	\$390,920	190
Southwest IdahoFPD	Coyote Rock	\$319,572	36
SITPA	Upper Deep	\$267,894	12
Southwest IdahoFPD	N. Drybuck	\$158,498	58
Mica FPD	Fish Creek II	\$150,605	12
Cataldo FPD	Mullan Pass I	\$69,171	3
SITPA	East Mountain	\$54,089	6
South West FPD	Deer Creek	\$54,015	3
	Total	\$6,899,840	9,051

Tables 3 and 4 illustrate equipment use burned the most area, was the highest cost per fire, but due to one large fire, ranked 7<sup>th</sup> in cost per acre at \$625. Lightning fires cost the most per acre to suppress.

Our average cost per fire was \$22,154 and cost per acre was \$598. Human caused fires cost \$6,773,239 (84% of the total). Of this amount, \$158,102 (2 percent) has been billed and we have collected \$19,562 (12 percent) of what we have billed. Since the fire reports were completed, these amounts have increased.

Costs to the Endowments, in resource damage, are estimated at \$516,741. The vast majority of this was on the Hunt Cr. Fire on the Priest Lake Forest Protective District.

Table 3

Number of Fires by Cause, with Costs

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General Cause	% of Fires	# of Fires	Total Cost	% of Cost	Cost /Fire
Lightning	48	172	\$1,246,642	15.5	\$7,248
Debris Burning	16	57	\$132,892	1.7	\$2,332
Miscellaneous	15	54	\$552,369	7	\$10,229
Equipment Use	12	42	\$5,995,376	75	\$142,747
Campfire	4	15	\$15,794	0.2	\$1,053
Smoking	3	10	\$61,667	0.8	\$6,167
Arson	2	6	\$10,749	0.1	\$1,791
Children	1	4	\$3,890	0.05	\$973
Railroad	1	2	\$500	0.01	\$250
Totals		362	\$8,019,881		\$22,154

Table 4

Acres Burned by Cause, with Costs

General Cause	Acres	Total Cost	Cost/Acre	Amount	Amount
	Burned			Billed	Collected
Equipment Use	9,585	\$5,995,376	\$625	\$57,437	\$414
Miscellaneous	3,439	\$552,369	\$161	\$3,198	\$258
Debris Burning	233	\$132,892	\$569	\$90,654	\$17,583
Lightning	124	\$1,246,643	\$10,021	\$0	\$0
Smoking	7	\$61,667	\$8,413	\$5,987	\$655
Arson	7	\$10,749	\$1,536	\$0	\$0
Campfire	4	\$15,794	\$4,029	\$0	\$0
Children	1	\$3,891	\$4,059	\$326	\$326
Railroad	1	\$500	\$2500	\$500	\$325
Totals	13,401	\$8,019,881	\$598	\$158,102	\$19,562



#### **AIRCRAFT USE**

IDL was at a turning point in 2002 when the final year of the Craigmont Air Service contract for Single Engine Air Tankers (SEATS) was completed. This was also a tragic year, with the loss of two heavy federal air tankers during wildland fire fighting operations in the west. An inspection process was developed to provide the aging tanker fleet with yet another safeguard. During this laborious process, it was unknown how many airtankers would be available for 2003. Rather than risk no local airtanker availability, IDL chose to contract two larger SEATs that could operate in most of the environments of the small SEATs yet having enough speed, range and capacity to help offset the possibility of no large air tanker being available in North Idaho.

Evergreen Flying Service of Louisiana provided two 802 Air Tractor SEATs this season. These 800 gallon capacity aircraft require a longer runway and were based at the USFS tanker base in Grangeville. An agreement was developed whereby the USFS provided the base facility, retardant and daily management of the aircraft. Personnel at our Craigmont Area provided oversight and set priorities for flight missions. Using the Grangeville facility resulted in a direct savings of \$41,145 just for the retardant used on IDL incidents. The aircraft flew a combined total of 205 hours dropping 183,400 gallons of retardant with over 65% of the flight time on USFS incidents. Payment to the vendor for this years' contract for availability, flight time and miscellaneous standby/per diem was \$577,038 with \$226,616 reimbursed to IDL by the USFS.



IDL contracted two light helicopters with operating bases in Coeur d'Alene and Craigmont. Although from two different vendors, both aircraft were Aerospatial 350 BA models with five passenger seats and a usable water dropping capacity of 115 gallons up from the maximum volume of 75 gallons in previous years.

Silverhawk Aviation flew 28.3 hours of the Craigmont contract with a cost of \$43,759. About half way through this contract, the aircraft sustained major damage during an accident while initial attacking a fire east of Lewiston. The pilot had just dipped from Mann Lake and experienced a loss of power at an altitude of 100 – 150 feet above ground while transitioning to forward flight. The pilot was able to complete an autorotation with a hard landing and exit the aircraft. He sustained a back injury in addition to numerous cuts and bruises but

was fortunate that no surgery was required for his injuries. The NTSB is in charge of the accident investigation and has issued a preliminary report using information from the pilot and witnesses. The engine was removed and shipped to a facility for further testing.

River City Helicopters flew 128.4 hours on the Coeur d'Alene contract with a total cost of \$198,068. This aircraft is based at the Coeur d'Alene Interagency

Dispatch Center and is used as the primary initial attack helicopter. The Idaho

Panhandle National Forest will reimburse IDL over \$82,000 for use of this aircraft in 2003.

#### **NATIONAL FIRE PLAN**

The 14 member, Idaho State Fire Plan Working Group has been active during 2003 providing leadership, commissioning studies, recommending project priorities and distributing grant funding. Through this group, among other activities:

- -- IDL has issued 23 grants for about \$8,000,000.
- --Ten county mitigation plans have been written, and 34 more are nearing completion.

The following website will provide further information about the implementation of the fire plan in Idaho: "www2.state.id.us/lands/".

#### **VOLUNTEER FIRE ASSISTANCE (VFA)**

The Volunteer Fire Assistance program improves the capability and effectiveness of America's 26,000 rural volunteer fire departments (170 in Idaho) to protect lives and other rural investments. The purpose of this program is to provide financial, technical, and other assistance to State Foresters and other appropriate officials to organize, train, and equip fire departments in rural communities. In 2003, 26 rural volunteer fire departments received the \$166,364 Volunteer Fire Assistance funds made available to Idaho.

#### **IDAHO FIRE ASSISTANCE PROGRAM (IFAP)**

Due to inadequate General Funds, no IFAP monies were distributed in 2003.



Some of the structure loss on the Flannigan Fire.

#### FEDERAL EXCESS PERSONAL PROPERTY

The Forest Service is charged with assuring that federal excess property is acquired, used, managed, and disposed of in accordance with federal laws and regulations. Federal excess personal property (FEPP) is loaned to state forestry agencies and their cooperators for wildland and rural community fire protection. In 2003, 64 excess property items (9 vehicles, 55 misc.) valued at \$355,184, were acquired and placed into service in Idaho. The total value of the FEPP inventory in Idaho is about \$12,559,821, consisting of 429 pieces of rolling stock and 570 pieces of miscellaneous equipment.

#### WILDLAND FIRE PREVENTION

Throughout the State of Idaho, Area offices and Associations planned and completed many Fire Prevention activities. Many of these were interagency in nature. Various areas participated in parades, elementary school educational programs and aggressive Fire Prevention sign campaigns. Some examples are:

- --The Garden Club Annual poster contest.
- -- Priest Lake developed a new fire prevention PowerPoint presentation.
- --CPTPA and IDL hosted high school prevention contests where senior students constructed displays of home fire safety and defensible space.
- Becky Williams, a Priest Lake Elementary student, won honors from an 8
   State region with the Smokey poster she created last year as a fifth grader.

--Two employees from Craigmont helped with the Keep Idaho Green road-painting program and completed 204 prevention signs at rest stops, historical sites and state parks. This is an interagency program involving Department of Transportation, Department of Parks and Recreation, Region 4 of the US Forest Service and the Idaho State Office of the Bureau of Land Management.

#### FIRE CACHE

The role of the Coeur d' Alene Interagency Fire Cache is to provide logistical support to requesting State, Federal, and cooperating agencies. Although support is primarily oriented toward wildland fire suppression activities, the fire cache also provides assistance for Homeland Security, declared State and Federal emergencies and other natural disasters, as well as large projects such as prescribed burns. Fire Cache support is provided to a four state region as well as those requesting Agencies encompassed within the Northwest Compact.

Statistically, the 2003 fire season was a record year for the Fire Cache. The value of materials issued was:

Total issue values
 In-Region Issues
 Out of Region Issues
 \$4,060,230.34
 \$3,020,826.82
 \$1,039,403.52

Line items issuedLine items returned5,4416,279

The total Fire Cache transaction value for 2003 season including returns was:

• \$6,767,629.55

Wildland fire suppression efforts supported by the Fire Cache included:

- Six-Type 3 incidents.
- Four-Type 2 incidents.
- One-Type 1 incident.
- Support to three National Fire Caches (GBK, NRK, NWK).
- Numerous Initial Attack (IA) incidents.

The figures generated by the annual Fire Cache inventory, places total value of supplies and equipment at:

- Prior to posting inventory-- \$2,905,612.93
- After posting inventory-- \$2,908,200.04
- Net value increase-- \$2,587.11 or +0.089%

Reflected in the ICBS database was **148,623** total items prior to inventory, **152,026** items were actually counted, resulting in an inventory accuracy rate of **97.8%**.

In summary, the fire cache had a banner year in all manners of business. We continue to strive towards excellence in providing support to our State and Federal cooperators.

# NUMBER OF FIRES IN EACH SIZE CLASS, BY DISTRICT-2003

DISTRICT	TOTAL	Α	В	С	D	Е	F	G
SITPA	50	45	4	1				
PEND OREILLE	38	27	11					
St. JOE	35	24	10	1				
СРТРА	34	28	5	1				
CRAIG MTN.	33	21	8	2		1	1	
KOOTENAI VAL	32	22	8	2				
CATALDO	30	16	14					
SOUTH WEST	29	14	13	2				
PRIEST LAKE	25	20	4			1		
MICA	20	8	11	1				
PONDEROSA	19	6	7	4	2			
MAGGIE CR.	17	8	7	1				1
TOTAL	362	239	102	15	2	2	1	1

# **CAUSES BY DISTRICT**

DISTRICT	TOTAL	ARSON	CAMP	CHILDREN	DEBRIS	EQUIP	LIGHTNING	MISC	RAIL	SMOKING
			FIRE		BURNING	USE			ROAD	
SITPA	50		5		6	2	32	5		
PEND ORE	38				15	1	13	7	2	
ST. JOE	35	1	2	1	6	4	17	3		1
СРТРА	34		1	1	1	7	13	11		
CRAIG MT	33		2		3	7	19	2		
KOOT VAL	32	1	1	2	9	5	10	1		3
CATALDO	30		1		1	1	21	4		2
SOUTH WE	29	1	1			8	14	4		1
PRIEST L.	25		1			1	20	3		
MICA	20				7		6	4		3
POND	19				5	4	5	5		
MAGGIE CR	17	3	1		4	2	2	5		
TOTALS	362	6	15	4	57	42	172	54	2	10

# **DISTRICT ACRES BY CAUSE**

DISTRICT	TOTAL	LIGHTNING	CAMP FIRE	SMOKING	DEBRIS BURNING	ARSON	EQUIP USE	RAIL ROAD	CHILDREN	MISC
MAGGIE CR	8,168	5	1		15	1	8,142			4
CRAIG MT	3,849	21	1		1		627			3,200
PRIEST LK	597	5	1				590			1
POND	414	5			183		32			194
SOUTH WE	119	12	1	1		4	100			3
KOOT VAL	68	3	1	1	4	1	58		1	1
ST. JOE	44	21	1	1	8	2	1		1	10
СРТРА	43	2	1		1		33		1	7
MICA	39	15		2	13					9
SITPA	25	22	1		1		1			1
CATALDO	22	11	2	3	1		2			3
PEND OR	14	2			6		1	1		6

<sup>\*\*</sup> SOME ROWS DO NOT EXACTLY ADD UP DUE TO ROUNDING.

# **SUPPRESSION COST PER ACRE--2003**

DISTRICT	TOTAL ACRES	TOTAL COST	COST/ACRE
SITPA	25	\$362,280	\$14,491
CATALDO	22	\$298,302	\$13,559
SOUTH WE	119	\$630,844	\$5,301
MICA	39	\$189,606	\$4,862
PRIEST LK	596	\$2,711,217	\$4,549
ST. JOE	44	\$121,601	\$2,764
PEND OR	14	\$37,633	\$2,688
POND	414	\$519,964	\$1,256
СРТРА	43	\$49,856	\$1,159
KOOT VAL	68	\$74,200	\$1,091
MAGGIE CR	8,168	\$2,894,403	\$354
CRAIG MT	3,849	\$129,976	\$34

Note: Smaller acreages burned normally yield higher costs per acre.